

of the range of this species reading 'Mt. Abu' and initialled by Charles McCann then Assistant Curator of the Society. This does not appear to have been published and the specimen is not available in our collection.

BOMBAY NATURAL HISTORY SOCIETY,  
91, WALKESHWAR ROAD,  
BOMBAY 6,  
December 18, 1962.

J. C. DANIEL  
Curator

18. AN INSTANCE OF PARTIAL AMBICOLOURATION IN  
THE ORIENTAL SOLE, *BRACHIRUS ORIENTALIS*  
(BLOCH & SCHNEIDER)

(With a plate)

Pigmentation on the blind side of flatfishes has been recorded as an abnormality. Cunningham & MacMunn (1893) termed such abnormal specimens as 'ambicolourate' and the phenomenon has since then been called 'ambicolouration'. Amongst Indian flatfishes, ambicolouration was first recorded in the 'Pan' sole, *Brachirus pan* (Hamilton), by Jones & Menon (1950), discussing its ontogenic significance.

Norman (1934) classified the pigmentation on the blind side into three categories as staining, spotting, and true ambicolouration. True ambicolouration is very rare and may be: partial pigmentation, trunk pigmentation, nearly complete ambicolouration, and complete ambicolouration.

On 8 June 1960, during a visit to the Crawford Market at Bombay, the authors came across an ambicolourate specimen of *Brachirus orientalis* (Bloch & Schneider) (see plate) along with a few other normal specimens of the same species. This record may be of interest as it is the first of its kind from this area.

The ambicolourate specimen measured 162 mm. in total length. The uncoloured anterior portion on the blind side is almost heart-shaped and the pigmentation commences from the 33rd dorsal and 9th anal rays. The pigmentation along the anterior region and the fins is darker than the central portion.

The pectoral fin on the blind side was smaller as is normal in the species. Jones & Menon (1950) have referred to a case of nearly

complete ambicolouration in *Brachirus pan* in which both pectoral fins were of the same size.

TARAPOREVALA MARINE BIOLOGICAL  
RESEARCH STATION,  
BOMBAY 2,  
November 16, 1962.

R. M. PRADHAN  
M. J. PRADHAN

#### REFERENCES

- \* Cunningham, J. T., & MacMunn, C. A. (1893) : *Phil. Trans. Roy. Soc.* **184** : 801-802.  
\* Jones, S., & Menon, P. M. G. (1950) : An interesting case of ambicolouration in the 'Pan' Sole, *Brachirus pan* (Hamilton). *Rec. Ind. Mus.* **48** (3) : 67-70.  
\* Norman, J. R. (1934) : A Systematic Monograph of the Flatfishes (*Heterostomata*), I, pp. 22-27. London.

\* Not consulted in original.

### 19. MIGRATION OF ELVERS IN THE WEST HIGHLANDS OF SCOTLAND<sup>1</sup>

(With two plates)

With reference to Mr. K. H. Ibrahim's Miscellaneous Note at pages 810 to 812 of Volume 58 of the *Journal*, D. E. Reuben has drawn our attention to the following passage in Gavin Maxwell's (1960) RING OF BRIGHT WATER, describing the migration of elvers in the west highlands of Scotland:

'Early in May comes the recurrent miracle of the elvers' migration from the sea. . . . When the elvers reach the Camusfeàrna burn—no more than a uniform three inches long nor thicker than a meat-skewer, steel-blue when seen from above, but against the light transparent except for a red blob at the gills—they have been journeying in larval form for two whole years from their breeding grounds south-west of Bermuda, through two thousand miles of ocean and enemies. During that long, blind voyage of instinct their numbers must have been reduced not to a millionth but a billionth of those who set forth, yet it is difficult to imagine that there can have been vaster hordes than reach the Camusfeàrna burn; still more difficult

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<sup>1</sup> The extract and the photographs are reproduced by kind permission of the author from RING OF BRIGHT WATER, by Gavin Maxwell, published by Messrs Longmans, Green & Co. Ltd., London.